

### **Alternative Embodiment AX**

Another embodiment concerns a document processing system for processing a plurality of currency bills to be deposited in a financial account of a customer. The currency scanning device comprising an input receptacle adapted to receive a plurality of currency bills. An image scanner is adapted to obtain an image of at least one side of a currency bill, extract data in at least one of a plurality of data fields from the image, and create an image file containing the image of the currency bill and the extracted data. A transport mechanism is adapted to transport each of the plurality of currency bills, one at a time, from the input receptacle past the image scanner, to at least one output receptacle. A controller is coupled to the transport mechanism and the image scanner, and adapted to control operation of the transport mechanism and operation of the image scanner. The controller is coupled to an evaluation unit, which is adapted to determining denomination of each of the currency bills. Memory is communicatively coupled to the controller and adapted to store images of currency bills.

### **Alternative Embodiment AY**

In a system in accordance with embodiment AX, the determination of denomination is based on predetermined criteria.

### **Alternative Embodiment AZ**

In a system in accordance with embodiment AX, the determination of denomination occurs as the bills are transported through the system.

### **Alternative Embodiment BA**

In a system in accordance with embodiment AX, the controller is adapted to sort images of currency bills stored in memory according to preset criteria.

### **Alternative Embodiment BB**

In a system in accordance with embodiment BA, the preset criteria for sorting images comprises at least one of a deposit account name, a deposit account number, a date of deposit, a time of deposit, and a serial number of a currency bill.

### **Alternative Embodiment BC**

In a system in accordance with embodiment AX, the controller is adapted to retrieve from memory an image of a currency bill to enable review of at least one of the plurality of data fields of a currency bill.

### **Alternative Embodiment BD**

In a system in accordance with embodiment AX, the controller is adapted to retrieve from memory images of currency bills based on an account number associated with the images.

#### **Alternative Embodiment BE**

In a system in accordance with embodiment AX, the controller is adapted to receive and process requests from a source unrelated to a transaction involving the subject of the requests. For some applications, the requests comprise requests to access the images stored in memory.

#### **Alternative Embodiment BF**

In a system in accordance with embodiment AX, the controller is adapted to flag a currency bill having a serial number matching one or more predetermined serial numbers stored in memory.

#### **Alternative Embodiment BG**

In a system in accordance with embodiment BF, the controller is further adapted to notify a user via a monitor when a currency bill is flagged.

#### **Alternative Embodiment BH**

In a system in accordance with embodiment BG, the controller is adapted to flag a currency bill based on predetermined criteria.

#### **Alternative Embodiment BI**

In a system in accordance with embodiment BH, the predetermined criteria is based on one or more: serial number data, denomination data, series data, issuing bank data, image quality, infrared characteristics, ultraviolet characteristics, color shifting, magnetic, or other ink characteristics, watermark characteristics, and thread characteristics.

#### **Alternative Embodiment BJ**

In a system in accordance with embodiment AX, the image scanner is further adapted to tag the image of the currency bill with a counterfeit test indicator identifying a counterfeit test performed on the currency bill and a result of the test.

#### **Alternative Embodiment BK**

In a system in accordance with embodiment AX, said output receptacle comprises exactly one output bin and said input receptacle comprises exactly one input bin.

#### **Alternative Embodiment BL**

A system, in accordance with embodiment AX, comprises exactly two output bins and exactly one input bin, wherein said output receptacle is one output bin and said input receptacle is the one input bin.

#### **Alternative Embodiment BM**

A system, in accordance with embodiment AX, comprises exactly one output bin, wherein said output receptacle is the one output bin; and comprises exactly two input bins, including the said input receptacle.

#### **Alternative Embodiment BN**

A system, in accordance with embodiment AX, comprises exactly two output bins, including said output receptacle; and comprises exactly two input bins, including said input receptacle.

#### **Alternative Embodiment BO**

A1 A system, in accordance with embodiment AX, comprises a plurality of output bins, including said output receptacle; and comprising exactly two input bins, including the input receptacle.

#### **Alternative Embodiment BP**

This embodiment concerns a document processing device for processing a plurality of currency bills and checks to be deposited in a financial account of a customer. The document processing device comprise a first and second input receptacles, the first being adapted to receive a plurality of currency bills, the second being adapted to receive a plurality of checks. An image scanner is adapted to obtain an image of at least one side of a currency bill and to extract serial number field data from the image. The image scanner is also adapted to create an image file containing an adequate amount of information to review the image of the currency bill and the serial number field. The adequate amount is determined based on predetermined criteria. Preferably, the information is sufficient to at least reproduce a sufficient portion of the image to assess a predetermined criteria. Such assessment may be achieved via a tag, e.g. a blinking like, within the image and indicating a condition of the predetermined criteria. Likewise, the image scanner is adapted to obtain an image of at least one side of a check and to create an image file containing the image of the check.

A transport mechanism is adapted to transport from the input receptacles each of the plurality of currency bills and checks, one bill or check at a time, past the image scanner, to at least one output receptacle. The transport mechanism and the image scanner are coupled to a

controller. The controller is adapted to control operation of the transport mechanism and operation of the image scanner.

An evaluation unit is coupled to the controller and adapted to determine denomination of each of the currency bills and the checks. And memory is communicatively coupled to the controller and has stored therein data from at least one serial number associated with counterfeit currency bills. The controller is adapted to retrieve from memory data stored therein from at least one serial number and compare extracted serial number field data to the data from retrieved from memory. The scanning device is adapted to reject any currency bills based on a comparison between extracted serial number field data and retrieved data. For some applications, the scanning device is adapted to reject any currency bill having a serial number matching a serial number stored memory.

#### **Alternative Embodiment BQ**

AI An embodiment is directed to a method for processing currency bills to be deposited in a financial account belonging to a customer, wherein the customer is using a document scanning device to affect his financial account. The method comprises receiving a stack of currency bills into an input receptacle and transporting each of the bills, one at a time, from the input receptacle to an output receptacle. An image of each of the currency bills is obtained with an image scanner. The bill image is at least a portion of the bill. A serial number for each bill is extracted and an image file, preferably for each bill, is created which contains the extracted serial number and the bill image. The image file is typically stored in memory.

#### **Alternative Embodiment BR**

A method in accordance with embodiment BQ, comprises outputting the bills to exactly one output receptacle, wherein the exactly one output receptacle is the output receptacle.

#### **Alternative Embodiment BS**

A method in accordance with embodiment BQ, comprises selectively outputting the bills to exactly two output receptacles, wherein the two output receptacles include the output receptacle.

#### **Alternative Embodiment BT**

A method in accordance with embodiment BT, comprises selectively outputting the bills to one or more output receptacles, wherein the one or more output receptacles comprise the output receptacle.

### **Alternative Embodiment BU**

Another embodiment is directed toward a method for processing currency bills to be deposited in a financial account associated with a customer. The method comprises receiving a stack of currency bills into an input receptacle; and transporting each of the bills, one at a time, from the input receptacle to an output receptacle. The method also comprises obtaining an image of each of the currency bills and extracting a serial number for each bill. And in accordance with the method, an image file is created and stored in memory. In some applications of the method, the file contains an image of the bill and the extracted serial number.

### **Alternative Embodiment BV**

A method in accordance with embodiment BU, comprises transporting the image file to memory at a remote location.

### **Alternative Embodiment BW**

A method in accordance with embodiment BU, comprises sorting the image file by the financial account number.

### **Alternative Embodiment BX**

This method, which is for processing currency bills to be deposited in a financial account associated with a customer, comprises receiving a stack of currency bills in an input receptacle; and transporting each of the bills, one at a time, from the input receptacle to an output receptacle. This method includes obtaining an image of each of the currency bills with an image scanner; extracting a data field from each of the images of the currency bills; and creating an image file containing the extracted serial number and the image. The image file is in preferably stored in memory.

### **Alternative Embodiment BY**

A method in accordance with embodiment BX, comprises comparing the extracted data field to a list of extracted data fields stored in memory and associated with counterfeit bills.

### **Alternative Embodiment BZ**

A method in accordance with embodiment BX, comprises receiving the bills from a single input receptacle, wherein the input receptacle is the single input receptacle and selectively transporting bills to at least one of a first output receptacle and a second output receptacle, wherein the output receptacle is the first output receptacle.

#### **Alternative Embodiment CA**

A method in accordance with embodiment BZ, comprises transporting bills to the first output receptacle and transporting checks to the second output receptacle.

#### **Alternative Embodiment CB**

A method in accordance with embodiment BZ, comprises enabling a user to designate the first and second output receptacles to receive either one of currency bills or checks, or to receive both currency bills and checks.

#### **Alternative Embodiment CC**

A method in accordance with embodiment BZ, comprises sorting the currency bills prior to sorting the checks, off-sorting one denomination into one of the first and second output receptacles, and transporting all other denominations into the other of the first and second output receptacles.

#### **Alternative Embodiment CD**

A method in accordance with embodiment CD, comprises sorting the checks after sorting the currency bills, sorting checks drawn on the deposit financial institution into one of the first and second output receptacles, and transporting checks drawn on all other financial institutions into the other of said first and second output receptacles.

#### **Alternative Embodiment CE**

A method in accordance with embodiment BZ, comprises sorting the checks prior to sorting the currency bills, wherein checks drawn on the deposit financial institution are sorted into one of the first and second output receptacles and checks drawn on all other financial institutions are sorted into the other of said first and second output receptacles.

#### **Alternative Embodiment CF**

A method in accordance with embodiment BZ, comprises sorting currency bills after sorting checks, wherein sorting currency bills comprises off-sorting one denomination into one of the first and second output receptacles, and transporting all other denominations into the other of the first and second output receptacles.

#### **Alternative Embodiment CG**

A method in accordance with embodiment BZ, comprises transporting the currency bills into the second output receptacle after the first output receptacle is filled, and then transporting currency bills to the first output receptacle after the second output receptacle is filled, wherein checks are sorted separately from currency bills.

#### **Alternative Embodiment CH**

In a method in accordance with embodiment CG, currency bills are sorted before checks.

#### **Alternative Embodiment CI**

A method in accordance with embodiment CG, comprises signaling an operator when one of the first and second output receptacles is full. The operator is typically the customer or an employee of a financial institution.

#### **Alternative Embodiment CJ**

A method in accordance with embodiment CG, comprises halting transporting when both the first and second output receptacles are full.

#### **Alternative Embodiment CK**

A method in accordance with embodiment CG, comprises transporting checks drawn on a pre-selected financial institution into one of the first and second output receptacle and transporting checks drawn on another financial institution into the other of the first and second output receptacle.

#### **Alternative Embodiment CL**

This embodiment concerns a document processing device for processing a plurality of currency bills and checks to be deposited in a financial account of a customer. The document processing device comprise a first and second input receptacles, the first being adapted to receive a plurality of currency bills, the second being adapted to receive a plurality of checks. An image scanner is adapted to obtain an image of at least one side of a currency bill and to extract a serial number field from the image. The image scanner is also adapted to create an image file containing the image of the currency bill and the serial number field. Likewise, the image scanner is adapted to obtain an image of at least one side of a check and to create an image file containing the image of the check. It is further adapted to obtain a payment amount from each of the checks.

A transport mechanism is adapted to transport from the input receptacles each of the plurality of currency bills and checks, one bill or check at a time, past the image scanner, to at least one output receptacle.

A controller is coupled to the transport mechanism and the image scanner, and adapted to control operation of the transport mechanism and operation of the image scanner. The controller is also adapted to transmit information to a first computer, wherein the first

computer is adapted to credit the financial account of the customer with the payment amount.

An evaluation unit is coupled to the controller and adapted to determine denomination of each of the currency bills and the checks.

Memory is communicatively coupled to the controller and has stored therein at least one serial number associated with counterfeit currency bills. The controller is adapted to retrieve the at least one serial number from memory and compare extracted serial number field to the at least one stored serial number retrieved from memory. The scanning device is adapted to reject any currency bills having a serial number field matching a serial number stored memory.

#### **Alternative Embodiment CM**

In a device in accordance with embodiment CL, the imager scanner is adapted to take images of both sides of a currency bill.

#### **Alternative Embodiment CN**

A1 In a device in accordance with embodiment CL, the output receptacle comprises exactly one output receptacle.

#### **Alternative Embodiment CO**

A device, in accordance with embodiment CL, comprises exactly two output receptacles, including the output receptacle.

#### **Alternative Embodiment CP**

A device, in accordance with embodiment CL, comprises one or more output receptacles, including the output receptacle.

#### **Alternative Embodiment CQ**

A device, in accordance with embodiment CL, comprises two output receptacles, including the output receptacle, wherein one output receptacle is adapted to receive a stack of currency bills and the other input receptacle is adapted to receive a stack of checks. The input receptacle is adapted to receive both currency bills and checks.

#### **Alternative Embodiment CR**

A device, in accordance with embodiment CL, comprises two input receptacles, including the input receptacle, wherein one of the input receptacles is adapted to receive a stack of checks and the other of the two input receptacles is adapted to receive a stack of currency bills. The output receptacle is adapted to receive both currency and checks.

#### **Alternative Embodiment CS**



A device, in accordance with embodiment CL, comprises two input receptacles, including the input receptacle; and two output receptacles, including the output receptacle.

#### **Alternative Embodiment CT**

A device, in accordance with embodiment CL, comprises two input receptacles, including the input receptacle; and one or more output receptacles, including the output receptacle.

#### **Alternative Embodiment CU**

This embodiment is directed toward a currency scanning device for accepting currency bills from a customer. The device comprises an input receptacle adapted to receive a plurality of currency bills, and an image scanner adapted to obtain an image of a side of a currency bill and to extract one or more data fields from the image. A transport mechanism transports each of the plurality of currency bills, one at a time, from the input receptacle past the image scanner, to at least one output receptacle.

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An input device is adapted to receive an account number from the customer. A controller, coupled to the transport mechanism and the image scanner, is adapted to control operation of the transport mechanism and the image scanner. The controller is further adapted to create an image file containing the image of the currency bill, the one or more data fields and an account number to which the currency is being deposited. The account number to which the currency is being deposited may be the account number received by the input device. An evaluation unit, adapted to determine denomination of processed currency bills, is coupled to the controller. Memory is coupled to the controller and adapted to store the image file. The memory is configured to enable searching for an image file based on the one or more data fields.

#### **Alternative Embodiment CV**

In a device in accordance with embodiment CU, the imager scanner is adapted to take images of both sides of a currency bill.

#### **Alternative Embodiment CW**

In a device in accordance with embodiment CU, the output receptacle comprises exactly one output receptacle.

#### **Alternative Embodiment CX**

A device, in accordance with embodiment CU, comprises exactly two output receptacles, including the output receptacle.

#### **Alternative Embodiment CY**

A device, in accordance with embodiment CU, comprises one or more output receptacles, including the output receptacle.

#### **Alternative Embodiment CZ**

A device, in accordance with embodiment CU, comprises two output receptacles, including the output receptacle, wherein one output receptacle is adapted to receive a stack of currency bills and the other input receptacle is adapted to receive a stack of checks, and wherein the input receptacle adapted to receive both currency bills and checks.

#### **Alternative Embodiment DA**

A device, in accordance with embodiment CU, comprises two input receptacles, including the input receptacle, wherein one of the input receptacles is adapted to receive a stack of checks and the other of the two input receptacles is adapted to receive a stack of currency bills, and wherein the output receptacle is adapted to receive both currency and checks.

#### **Alternative Embodiment DB**

A device, in accordance with embodiment CU, comprises two input receptacles, including the input receptacle; and two output receptacles, including the output receptacle.

#### **Alternative Embodiment DC**

A device, in accordance with embodiment CU, comprises two input receptacles, including the input receptacle; and one or more output receptacles, including the output receptacle.

#### **Alternative Embodiment DD**

In this embodiment, a currency scanning device is adapted to accept currency bills from a customer. An input device is adapted to receive an account number from the customer. The device comprises an input receptacle adapted to receive a plurality of currency bills, an image scanner adapted to obtain an image of a side of a currency bill, and a transport mechanism adapted to transport each of the plurality of currency bills, one at a time, from the input receptacle past the image scanner, to at least one output receptacle.

The transport mechanism and the image scanner are coupled to a controller, which is adapted to control operation of the transport mechanism and the image scanner. The controller is further adapted to create an image file containing the image of the currency bill, the serial number field and the account number. Denominations of currency bills are

determined by an evaluation unit, which is coupled to the controller. Memory, coupled to the controller, is adapted to store the image file.

**Alternative Embodiment DE**

In a device in accordance with embodiment DD, the imager scanner is adapted to take images of both sides of a currency bill.

**Alternative Embodiment DF**

In a device in accordance with embodiment DD, the output receptacle comprises exactly one output receptacle.

**Alternative Embodiment DG**

A device, in accordance with embodiment DD, comprises exactly two output receptacles, including the output receptacle.

**Alternative Embodiment DH**

A device, in accordance with embodiment DD, comprises one or more output receptacles, including the output receptacle.

**Alternative Embodiment DI**

A device, in accordance with embodiment DD, comprises two output receptacles, including the output receptacle. One output receptacle of the two is adapted to receive a stack of currency bills and the other input receptacle is adapted to receive a stack of checks. The input receptacle is adapted to receive both currency bills and checks.

**Alternative Embodiment DJ**

A device, in accordance with embodiment DD, comprises two input receptacles, including the input receptacle; one of the input receptacles is adapted to receive a stack of checks and the other of the two input receptacles is adapted to receive a stack of currency bills. The output receptacle is adapted to receive both currency and checks.

**Alternative Embodiment DK**

A device, in accordance with embodiment DD, comprises two input receptacles, including the input receptacle; and two output receptacles, including the output receptacle.

**Alternative Embodiment DL**

A device, in accordance with embodiment DD, comprises two input receptacle and one or more output receptacles. The two input receptacles include the input receptacle; the one or more output receptacles, include the output receptacle.

**Alternative Embodiment DM**

Another embodiment concerns a document processing system for processing a plurality of currency bills and checks to be deposited in a financial account of a customer. The system comprises an input receptacle adapted to receive at least one of a plurality of currency bills and a plurality of checks.

The system further comprises a single image scanner adapted to obtain images of at least one side of both the checks and the currency bills and to extract a serial number field from the currency bill and to extract an amount from each of the checks. The image scanner is also adapted to create an image file containing the image of the currency bill and the serial number field. It is also adapted to create another image file containing the image of the check and the amount of the check. An image file may be created by adding data to an existing file or by setting up a new file. Further, the two images files may be separately stored or may be combined into a single existing file or a single new file.

Each of the checks and each of the currency bills are transported, one at a time, by a transportation mechanism. The transportation mechanism is adapted to transport the bills and checks from the input receptacle past the image scanner and to an output receptacle.

The transport mechanism and the image scanner are coupled to a controller that is adapted to control operation of the transport mechanism and operation of the image scanner. An evaluation unit, which is coupled to the controller, is adapted to determine denomination of each of the currency bills. Memory is communicatively coupled to the controller and adapted to store images of currency bills. The memory is further adapted to store images of the checks.

An interface is coupled to the controller and adapted to automatically communicate with a financial institution to transmit transaction information based on at least one of either evaluation of currency bills by the evaluation unit or evaluation of checks by the evaluation unit, wherein the transaction information is adequate to allow the financial institution is to credit a financial account belonging to a customer.

#### **Alternative Embodiment DN**

In a system in accordance with embodiment DM, the output receptacle comprises a single output receptacle.

#### **Alternative Embodiment DO**

In a system in accordance with embodiment DM, the output receptacle comprises two output receptacles, including the output receptacle.

#### **Alternative Embodiment DP**

Another embodiment concerns a document processing system for processing a plurality of currency bills to be deposited in a financial account of a customer. The system comprising an input receptacle adapted to receive a plurality of currency bills. An image scanner is adapted to obtain an image of at least one side of a currency bill, extract data at least one of a plurality of data fields from the image, and create an image file containing an adequate amount of information, wherein the amount of information is based on predetermined criteria.

Each of the plurality of currency bills is transported, one at a time, by a transport mechanism from the input receptacle past the image scanner, to at least one output receptacle. A controller, coupled to the transport mechanism and the image scanner, is adapted to control operation of the transport mechanism and operation of the image scanner.

Denomination of each of the currency bills is determined by an evaluation unit coupled to the controller. Memory is communicatively coupled to the controller and adapted to store image files of currency bills.

#### **Alternative Embodiment DQ**

In a system in accordance with embodiment DP, each bill is subjected to one or more counterfeit tests and the image file of a bill is stored after the bill is subjected to the one or more counterfeit tests.

#### **Alternative Embodiment DR**

In a system in accordance with embodiment DP, the controller is adapted to selectively subject a currency bill to one or more counterfeit tests based on predetermined criteria.

#### **Alternative Embodiment DS**

In a system in accordance with embodiment DR, the controller is adapted to continuing subjecting a currency bill to counterfeit tests until one of either the bill fails a counterfeit test to which the bill was subjected or the bill has passed a predetermined number of counterfeit tests.

#### **Alternate Embodiment DT**

Another embodiment concerns a document processing system for processing a plurality of checks to be deposited in a financial account of a customer. The system comprises an input receptacle adapted to receive a plurality of checks. An image scanner is adapted to obtain an image of at least one side of a check, extract at least one of a plurality of data fields from the image, and create an image file containing an adequate amount of information. The adequate

amount of information is based on predetermined criteria and includes data from the extracted data fields.

A transport mechanism is adapted to transport each of the plurality of checks, one at a time, from the input receptacle past the image scanner, to at least one output receptacle. The transport mechanism and the image scanner are coupled to a controller, which is adapted to control operation of the transport mechanism and operation of the image scanner. An evaluation unit, also coupled to the controller, is adapted to determine an amount of each of the checks. Memory is communicatively coupled to the controller and adapted to store image files of the checks.

#### **Alternative Embodiment DU**

This embodiment concerns a document processing device for processing a plurality of checks. The document processing device comprises an input receptacle adapted to receive a plurality of checks and an image scanner to image a check.

A<sub>1</sub> The image scanner is adapted to obtain an image of at least one side of a check and to extract data from one or more data fields of the image. The image scanner is also adapted to create an image file containing an adequate amount of information to review the image of the check, wherein the adequate amount of information is based on predetermined criteria.

A transport mechanism is adapted to transport each of the plurality of checks from the input receptacle, one at a time, past the image scanner, to at least one output receptacle.

A controller, coupled to the transport mechanism and the image scanner, is adapted to control operation of the transport mechanism and operation of the image scanner.

Memory, communicatively coupled to the controller, has stored therein data associated with suspect checks. The controller is adapted to retrieve the data from memory and compare the extracted data to the data retrieved from memory. The controller is adapted to reject any checks having data from a field matching data stored in memory.

An evaluation unit is coupled to the controller and adapted to determine amount of each of the checks.

#### **Alternative Embodiment DV**

This embodiment is directed to a method for processing checks to be deposited in a financial account belonging to a customer; the method the allows the customer to use a document scanning device to affect his financial account. The method comprises receiving a stack of checks into an input receptacle of the device and transporting each of the checks, one

at a time, from the input receptacle to an output receptacle. The method further comprises obtaining a check image of each of the checks with an image scanner. The check image comprises at least an adequate portion of the check to allow at least either reviewing the check or tracing the check. Further comprised in the method is a step of extracting a number from a data field of each creating an image file, preferably for each check, wherein the image file contains the extracted number and the check image. Typically the method comprises storing the image file in memory.

#### **Alternative Embodiment DW**

In a method in accordance with embodiment DV, the data field from which the data is extracted is selected from a group consisting of an ABA number field, and account number field, and a check number field.

#### **Alternative Embodiment DX**

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An embodiment is directed toward a method for processing checks to be deposited in a financial account associated with a customer. The method comprises receiving a stack of checks into an input receptacle; and transporting each of the checks, one at a time, from the input receptacle to an output receptacle. The method further comprises the step of obtaining an image of each of the checks and extracting one or more of an ABA number, an account number and a check number. The method also comprises creating an image file and storing the image file in memory. For some applications, the image file contains an image of the check and the one or more extracted numbers. In some applications, the one or more extracted numbers contained in the image file are contained in the image contained in the image file.

#### **Alternative Embodiment DY**

In a method in accordance with embodiment DX, data associated with suspect checks is retrieved from memory and compared to the one or more extracted numbers.

#### **Alternative Embodiment DZ**

This method, which is for processing checks to be deposited in a financial account associated with a customer, comprises receiving a stack of checks in an input receptacle; and transporting each of the bills, one at a time, from the input receptacle to an output receptacle. This method includes obtaining an image of each of the checks with an image scanner; extracting data from one or more data fields for an ABA number, account number, and a check number from each of the images of the checks; and creating an image file. The image

file contains the extracted data and the image. The image file is stored in memory for subsequent review.

#### **Alternative Embodiment EA**

This embodiment concerns a document processing device for processing a plurality of currency bills and checks to be deposited in a financial account of a customer. The document processing device comprise a first and second input receptacles, the first being adapted to receive a plurality of currency bills, the second being adapted to receive a plurality of checks. An image scanner is adapted to obtain an image of at least one side of a currency bill and to extract serial number field data from the image. The image scanner is also adapted to create an image file containing the image of the currency bill and the serial number field. Likewise, the image scanner is adapted to obtain an image of at least one side of a check and to create an image file containing the image of the check. The scanner is further adapted to obtain a payment amount from each of the checks.

A<sub>1</sub> A transport mechanism transports from the input receptacles each of the plurality of currency bills and checks, one bill or check at a time, past the image scanner, to at least one output receptacle.

A controller, coupled to the transport mechanism and the image scanner, controls operation of the transport mechanism and operation of the image scanner. The controller is also adapted to transmit information to a first computer, wherein the information transmitted is used by the first computer to credit the financial account of the customer with the payment amount. The controller is further adapted to selectively initiate either one or more tests for suspect checks or one or more tests for counterfeit bills prior to causing the financial account of the customer to be credited.

An evaluation unit coupled to the controller is adapted to determine denomination of each of the currency bills and the checks.

Memory, communicatively coupled to the controller, has stored therein at least one serial number associated with counterfeit currency bills. The controller is adapted to retrieve the at least one serial number from memory and compare extracted serial number field data to the at least one stored serial number retrieved from memory. The scanning device is adapted to reject any currency bills having serial number field data matching a serial number stored memory.

#### **Alternative Embodiment EB**



Another embodiment concerns a document processing system for processing a plurality of currency bills to be deposited in a financial account of a customer. The currency scanning device comprising an input receptacle adapted to receive a plurality of currency bills. An image scanner is adapted to obtain an image of at least one side of a currency bill, extract data from a data field of the bill, and create an image file containing the image of the currency bill and the extracted data. A transport mechanism is adapted to transport each of the plurality of currency bills, one at a time, from the input receptacle past the image scanner, to at least one output receptacle. A controller, coupled to the transport mechanism and the image scanner, is adapted to control operation of the transport mechanism and operation of the image scanner. The controller is coupled to an evaluation unit, which is adapted to determining denomination of each of the currency bills. Memory is communicatively coupled to the controller and adapted to store the image file and searched based on the date field of the currency bill.

#### **Alternative Embodiment EC**

A1 In a system in accordance with embodiment EB, the data field is a serial number field and the data from the serial number field is extracted from the image.

#### **Alternative Embodiment ED**

In a system in accordance with embodiment EB, the image scanner is adapted to extract data from another field, wherein the image file contains the data extracted from the data field separately from the data extracted from the other data field.

#### **Alternative Embodiment EE**

This embodiment concerns a document processing device for processing a plurality of currency bills to be deposited in a financial account of a customer. The document processing device comprises one or more input receptacle for receiving the currency bills. An image scanner is adapted to obtain an image of at least one side of a currency bill and to extract serial number field data from the image. The image scanner is also adapted to create an image file containing an adequate amount of information to review the image of the currency bill and the serial number field. The adequate amount is determined based on predetermined criteria to identify the currency bill for tracking purposes.

A transport mechanism is adapted to transport from the one or more input receptacles each of the plurality of currency bills, one at a time, past the image scanner, to at least one output receptacle. The transport mechanism and the image scanner are coupled to a controller, which is adapted to control operation of the transport mechanism and operation of

the image scanner.

An evaluation unit is coupled to the controller and adapted to determine denomination of each of the currency bills. And memory is communicatively coupled to the controller and has stored therein one or more serial numbers. The controller is adapted to retrieve from memory one or more serial numbers and compare an extracted serial number to one or more serial numbers retrieved from memory. The scanning device is adapted to flag any currency bills based on a comparison between an extracted serial number and one or more serial numbers retrieved.

#### **Alternative Embodiment EF**

A device in accordance with embodiment EE, comprising an input device adapted to receive a unique identifier associated with the customer, wherein the image file contains the unique identifier and the memory is searchable based on the unique identifier.

#### **Alternative Embodiment EG**

AI This embodiment is directed toward a system for tracking currency bills. The system comprises a plurality of scanning devices connected in a network architecture, wherein each scanning device comprises: an input receptacle adapted to receive a plurality of currency bills; an image scanner adapted to obtain an image of at least one side of a currency bill, extract a bill identifier from the image and create an image file containing the extracted bill identifier; and a transport mechanism adapted to transport each of the plurality of currency bills, one at a time, past the image scanner to at least one output receptacle.

Each scanning device comprises a controller coupled to the image scanner and the transportation mechanism, wherein the controller is adapted to control operation of the transport mechanism and the image scanner.

The system further comprises memory coupled to each of the scanning devices and having stored therein a plurality of currency bill identifiers. The system comprises a controller adapted to retrieve one or more bill identifiers from the memory and compare the one or more bill identifiers with and extracted bill identifier.

#### **Alternative Embodiment EH**

An embodiment is directed to a method for tracking currency bills to be deposited in a financial account belonging to a customer, wherein the customer is using a document scanning device to affect his financial account. The method comprises receiving a stack of currency bills into an input receptacle and transporting each of the bills, one at a time, from the input

receptacle to an output receptacle. An image of each of the currency bills is obtained with an image scanner. The bill image is at least a portion of the bill. The image scanner is adapted to extract a serial number for each bill and create an image file which contains the extracted serial number, the bill image and transaction information. A controller compares one or more serial numbers stored in memory with the extracted serial number to identify any matches between the extracted serial number and the stored serial numbers. If a match is found, the image file is reviewed to obtain the transaction information.

#### **Alternative Embodiment EI**

A1 This method, which is for processing currency bills to be deposited in a financial account associated with a customer, comprises receiving a stack of currency bills in an input receptacle; and transporting each of the bills, one at a time, from the input receptacle to an output receptacle. This method also includes obtaining an image of each of the currency bills with an image scanner; extracting a data field from each of the images of the currency bills; and creating an image file containing the extracted serial number and the image. The method further comprises storing the image file in memory. The method also comprises retrieving the image file to review the bill image after the currency bill has been deposited.

#### **Alternative Embodiment EJ**

This embodiment is directed toward a currency scanning device for accepting currency bills from a customer. The device comprises an input receptacle adapted to receive a plurality of currency bills, and an image scanner adapted to obtain an image of a side of a currency bill and to extract data from one or more data fields from the image. A transport mechanism transports each of the plurality of currency bills, one at a time, from the input receptacle past the image scanner, to at least one output receptacle.

An input device is adapted to receive an account number from the customer. A controller, coupled to the transport mechanism and the image scanner, is adapted to control operation of the transport mechanism and the image scanner. The controller is also coupled to the input device and further adapted to create an image file containing the image of the currency bill, data from the one or more data fields and the account number. The account number to which the currency is being deposited may be the account number received by the input device. An evaluation unit, adapted to determine denomination of processed currency bills, is coupled to the controller. Memory is coupled to the controller and adapted to store

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C- the image file. The memory is configured to enable searching for an image file based on the one or more data fields.

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